1	Q But it actually isn't a customer list if you read
2	it, is it? I mean, some of these say that they're just
3	inventory pages, three of them say that they're just test
4	pages. Do you see that?
5	A You're on which page?
6	Q This is Page Two of Private Radio Bureau Exhibit 5,
7	this, you know, so-called computer printout dated August 16th.
8	A There are some correct. There are some that
9	indicate that they're inventory. There's one here that's
10	unknown. There are a couple that are listed as let's see,
11	two that are listed for as test pages for Mike Raymond. I
12	see several here that associate I have a footnote
13	associated here that says the service it's no longer in
14	service due to problems or it changed to the radio common
15	carrier.
16	Q And actually if you look at those footnotes, that's
17	asterisk Number One next to Malcolm Combs, Ernie White, and
18	Gary Wortenburg and then you look at asterisk Number Two next
19	to James Howt which says changed to 152.150 because of system
20	problems, if you subtract those out, you're left with no
21	customers at all. Isn't that correct? Take your time going
22	over it.
23	JUDGE CHACHKIN: I'm having problems with this
24	theory of redirect. It can't be redirect since you didn't put
25	on any witnesses. Is that correct? You're not sponsoring

1	this person. I'm letting you examine, but it's going to have
2	to be in the form of cross examination and since this these
3	subjects have not been gone into, you can't ask these
4	questions.
5	In other words, you had your chance to ask questions
6	after we had direct examination by the Bureau. Then you had a
7	chance to ask cross or whatever you want to call it. Then we
8	had Mr. Hardman asking questions. The only one who could ask
9	redirect is the Bureau since the Bureau sponsored this
10	witness. You did not sponsor this witness, so you certainly
11	can't be given the right to treat this witness as your own.
12	I'm permitting you to ask questions in the form of cross and
13	I'm not going to permit this line of questioning since we're
14	not dealing with new subjects raised by the Bureau.
15	MR. JOYCE: Your Honor, I'll agree to whatever you
16	say in terms of the order of cross. The only reason I'm doing
17	it this way is I was trying to honor your preferences this
18	morning about the order of questioning.
19	JUDGE CHACHKIN: No, I did I did follow. The
20	Bureau started off with direct.
21	MR. JOYCE: I follow. And this is
22	JUDGE CHACHKIN: And then I let you ask questions.
23	It had to be cross. Since you didn't sponsor the witness, it
24	couldn't be direct examination.
25	MR. JOYCE: I need some clarification, too, because

25

this is most decidedly an area that Mr. Hardman went into.
JUDGE CHACHKIN: That's right. And the Bureau has
the right on redirect to go into it. But you don't have a
right to because your cross if you wanted to go into these
areas, you should've done it when you had your opportunity,
when you were asking questions.
MR. JOYCE: But I didn't understand at the time,
Your Honor, that unless I did this in the form of cross
examination this as I say, I will do it in whatever
order you wish.
JUDGE CHACHKIN: Well, I want to make clear, if
you're not sponsoring any witnesses, obviously you don't have
a right to conduct redirect examination.
MR. JOYCE: That's fine.
JUDGE CHACHKIN: All you can do is conduct cross
just like Mr. Hardman is.
MR. JOYCE: That's fine.
JUDGE CHACHKIN: And if the Bureau counsel doesn't
raise any new areas and neither you nor Mr. Hardman has a
right to question further, that's the end of it.
MR. JOYCE: But this is was an area of direct
testimony, was an area of
JUDGE CHACHKIN: I didn't say I said if on
redirect the Bureau does not go into new areas, you neither
you nor Mr. Hardman have a right to conduct further

1	examination.
2	MR. JOYCE: I understand. My problem
3	JUDGE CHACHKIN: The witness is excused at that
4	point.
5	MR. JOYCE: I perfectly understand, Your Honor. My
6	problem is if we had this clarification before Private Radio
7	Bureau had its redirect, I would have asked him these
8	questions on cross examination.
9	JUDGE CHACHKIN: Well, you didn't know what the
10	Bureau was going to ask on redirect.
11	MR. JOYCE: It doesn't matter. My questions are
12	irrespective of their redirect. That's my whole point, Your
13	Honor.
14	JUDGE CHACHKIN: Well, I understand. But why didn't
15	you ask these questions on cross when you had the witness on
16	cross if you felt you wanted to go into these areas?
17	MR. JOYCE: Am I not entitled to cross examine the
18	witness on the same subjects that Mr. Hardman is cross
19	examining the witness?
20	JUDGE CHACHKIN: Exactly. And you had an
21	opportunity on cross. You I called on you to cross examine
22	the witness. Then Mr. Hardman cross examined the witness.
23	And if Ms. Foelak had said at that point, "I have no further
24	questions, " then you wouldn't have any right to ask any
25	further questions.

1	MR. JOYCE: There's a misunderstanding. At the time
2	I was questioning him, Your Honor, I was under the impression
3	that I was limited to direct examination of the witness, not
4	cross examination.
5	JUDGE CHACHKIN: I don't understand why you would be
6	under that impression since it wasn't your witness.
7	MR. JOYCE: Because that's what I was instructed
8	this morning, Your Honor.
9	JUDGE CHACHKIN: Do you have any objection, Mr.
10	Hardman? Now, I'm going to have to permit Mr. Hardman an
11	opportunity to further examine and so we can go on forever
12	with this. The way we're proceeding is, is if it's if you
13	want you haven't put on any witnesses. So the Bureau will
14	go first, you will ask your questions, Mr. Hardman will ask
15	his questions, and if no areas are raised new areas are
16	raised on redirect, that's the end of the examination.
17	MR. JOYCE: I understand that now, Your Honor.
18	JUDGE CHACHKIN: I'll permit you, Mr. Hardman, if
19	you need any follow-up questions on this since he's getting a
20	second crack. Go ahead.
21	BY MR. JOYCE:
22	Q Mr. Walker, if you subtract out from this exhibit
23	the names that have asterisks next to them, isn't it true that
24	you're left with no paying customers?
25	MR. HARDMAN: Your Honor, I'm going to object to his

1	question. The witness never testified that he knew what these
	documents purported to be. Certainly he didn't give any
2	
3	instructions to the
4	JUDGE CHACHKIN: I'll sustain the objection. This
5	witness has no knowledge of what these documents mean. This
6	is all he was given. If you want to question somebody, you'll
7	have to question someone who provided these documents.
8	MR. JOYCE: All right, Your Honor.
9	JUDGE CHACHKIN: This witness is not in a position
10	to testify what this means or what it doesn't mean.
11	BY MR. JOYCE:
12	Q Mr. Walker, if someone is causing interference to
13	somebody on a shared frequency, are they is the person
14	who's not causing the interference required to shut down while
15	that interference continues or are they allowed to transmit as
16	best they can on top of that interference?
17	A They would not be allowed to cause interference to
18	the other station.
19	Q That wasn't my question though and I appreciate
20	that. My question was if someone is causing interference to a
21	shared frequency licensee, is the person who is not causing
22	the interference allowed to the best of his ability to
23	transmit on top of the interference?
24	A I don't believe that I can answer that. Neither of
25	these people are permitted to cause interference.

1	Q I know. The again, we're having a problem with
2	understanding my question. My question is
3	MR. HARDMAN: Your Honor
4	MR. JOYCE: Allow me to repeat the question if I
5	could, please, Mr. Hardman.
6	BY MR. JOYCE:
7	Q I'm sure that in many instances, you go out into the
8	field, broadcasting cases, private radio, whatever, somebody
9	is causing interference. Maybe it's intentional or it's
10	unintentional. There's also such a thing as legitimate
11	transmissions, not interference at all. Do we understand each
12	other on those terms?
13	A I think I understand your question.
14	Q If on a shared PCP frequency, if one person is
15	operating properly in accordance with the FCC's rules, they're
16	monitoring the channel, they have legitimate paging customers
17	out there, and they're trying to send a signal to those paging
18	customers, but they're receiving interference from non-paging
19	transmissions. It's simply whatever you want to call it, any
20	kind of ambient, electrical interference, intentional/
21	unintentional, is it proper for the person who is not causing
22	interference, who is complying with the FCC's rules and trying
23	to send out a page, is it proper for that person to send out a
24	page on top of the harmful interference?
25	MR. HARDMAN: Your Honor, I'm going to object to

1	that. It's a hypothetical question that has no discernable
2	relevance to this proceeding.
3	MR. JOYCE: It's hardly hypothetical.
4	JUDGE CHACHKIN: But you're asking him whether it's
5	permissible for retaliation to engage in interference. That's
6	basically what you're asking.
7	MR. JOYCE: No, that's not my question.
8	JUDGE CHACHKIN: Oh, that's exactly what you're
9	asking. You're saying, "If one is doing wrong, then is it all
10	right for me to do wrong? Because I didn't do it in the first
11	place." I mean, that's what you're asking essentially and I
12	don't think the witness can the witness answer that
13	question, is it different being harmful interference?
14	MR. WALKER: I believe I can answer this.
15	JUDGE CHACHKIN: What's the answer?
16	MR. WALKER: Yes. He's allowed to continue with his
17	transmissions provided he's not causing interference to
18	someone else.
19	BY MR. JOYCE:
20	Q It was a simple question. Thank you, Mr. Walker.
21	When you were inspecting, Mr. Hardman was trying to isolate, I
22	guess, what periods of time you were monitoring Capitol and
23	when you weren't. When you were at RAM's facilities, were you
24	able to monitor Capitol's transmissions as well?
25	A Not when we're inside the building. When we're in

1	the vehicle, as best I remember, yes, we could.
2	Q There weren't monitors or similar gizmos that you
3	had in your vehicle inside RAM's headquarters that you could
4	use to monitor?
5	A RAM may well have had some monitoring capability. I
6	suspect they did, but I don't recall.
7	Q Mr. Hardman mentioned intermodulation which we've
8	ruled out as the cause of interference. He had also mentioned
9	a malfunction. Was the interference that you determined
10	during your investigation caused by malfunction?
11	MR. HARDMAN: Your Honor, I'm going to object
12	because the witness again has testified that he had never
13	determined
14	JUDGE CHACHKIN: Sustained. Sustained.
15	BY MR. JOYCE:
16	Q Did you determine that there was any malfunction of
17	Capitol's equipment when you were investigating it
18	inspecting it?
19	A I could not identify a malfunction. It is apparent
20	to me that there was something that is not functioning
21	appropriately, simply because Capitol's Capitol was capable
22	or did transmit while RAM's transmitters were in the air. You
23	know, because that happened, something did not work as it
24	should have. I was not able to identify precisely what or
25	why.

1	Q Did you determine that it was due to inadvertence on
2	the part of Capitol?
3	A No, I didn't.
4	Q When you were monitoring, did you detect any
5	community repeater traffic on Capitol's frequency?
6	A No, but our monitoring was on the private carrier
7	channel, not on the link frequency.
8	Q A community repeater, my understanding, Ken Hardman
9	uses that term to refer to a private radio community repeater.
10	Is that your understanding of that?
11	A My understanding is the same, yes.
12	Q In other words, it shared a channel, two-way type
13	operation.
14	A Correct.
15	Q So that it's not the same as the control link, just
16	so we understand each other.
17	A It's different from the control link, but operating
18	on the same channel, correct. Different communications.
19	Q In any event, you did not determine that a community
20	repeater was causing an interference problem on this
21	frequency.
22	MR. HARDMAN: Your Honor, I object. Again, the
23	witness testified he didn't monitor the link frequency.
24	JUDGE CHACHKIN: Sustained.
25	BY MR. JOYCE:

Did any -- I'm not limiting my question to -- I'm 1 sure that I'm the cause of the confusion here, Mr. Walker. 2 3 I'm not limiting my question to any control link whatsoever. There is something called a community repeater. It's a type 4 of operation. When you were monitoring 152.48, did you 5 determine that there was any community repeater traffic on 6 7 that frequency? 8 No, we didn't. 9 Mr. Hardman and you talked about the storage capabilities of Capitol's system. I'm not sure I fully 10 11 understood that discussion. Are we referring to information that's stored in the terminal? 12 13 The capability of the paging terminal to store a A 14 number of pages until such time as the channel is available to 15 transmit. So that storage capability was considerably 16 limited. 17 But where I got lost there was I thought that Ken 18 Hardman and you were talking about two different things and 19 this is what I wanted to clarify. There is information that 20 can be stored and then sent out over that 152.48 frequency, 21 correct? 22 Correct. A 23 But then there's also in addition to that, isn't Q there, transmissions over that frequency? 24 25 A If the channel is idle, yes, there's real-time

1	trans real-time pages.
2	Q So this tone sequence test, as it's been called,
3	that was sent out, it could've been going out live over that
4	frequency. Plus in addition, if those tones were stored in
5	this memory bank of the terminal, all the information that was
6	stored was also going out over that frequency. Isn't that
7	possible?
8	A If I understand you correctly, you said from one
9	test page, one test sequence, you say there's perhaps two
10	things being transmitted?
11	Q No. Again, I apologize for not being clear in my
12	question. The tone sequence is stored in the terminal just
13	like a recorded message. Is that a fair analogy?
14	A Yes, I think so.
15	Q So just as I can speak to you live using this
16	microphone here, if I had a tape recorder next to me and were
17	using this microphone as a 152.48 frequency, they could've
18	been sending those tones live over 152.48 and then the tape-
19	recorded same sequence would've been also going out following
20	those live transmissions.
21	MR. HARDMAN: Your Honor, I object to that. There's
22	no foundation for any
23	JUDGE CHACHKIN: Sustained.
24	BY MR. JOYCE:
25	Q Although the tone sequence was of a certain

duration, when it's stored, that's obviously adding to the air-time that it would take up. Isn't that correct, Mr.
Walker?

A If it's only a single sequence, no, I don't think so. But you can store multiple -- or in this case, they were storing multiple sequences and yes, they are accumulative, each sequence taking roughly twenty seconds.

Q Again, if this is hypertechnical, Your Honor, I -so I apologize if I'm not perfect in verse and in the
terminology. Well, what's happening then is that those
transmissions that you were monitoring varied in length. It
wasn't the same each time, that RAM would transmit for a
certain period of time and then this tone sequence that had
been backing up, waiting for the channel to be clear, could be
accumulating five, six, seven, eight seconds worth of time and
then would go out over the frequency. Is that what was
happening?

A Correct. Except each sequence, each time they wanted to send a sequence, it was twenty -- roughly twenty seconds. If I was not able -- if we were not able to transmit the sequence during the current minute, that sequence would be stored and perhaps the next sequence as well. Then when we have the opportunity to transmit -- we would transmit the two sequences consuming forty seconds of air-time.

Q That was the point I was trying to get at earlier.

|So it is possible then that there was an accumulative effect. 2 It is accumulative, yes, to a point, to its -- to the limit on its storage capability. 3 Now, on the other side of 152.48, RAM is doing the 4 same thing. They have a terminal that's storing paging 5 messages. They send those out and it takes up a certain 6 7 amount of air-time, correct? 8 Correct. 9 Now, if that tone sequence of Capitol's comes up in 10 the middle of RAM's transmissions, then you've left on the 11 tape, if you will, a whole bunch of RAM pages that didn't get 12 out on the air, correct? Is that what was happening? 13 They went out on the air. Perhaps they were A 14 interfered with. Perhaps you or I, as a subscriber to the 15 paging, did not get the page. But the transmission was made. 16 But it's also possible, based on your understanding 17 of how these paging terminals store stuff, that if there was 18 so many RAM pages stored in there, that perhaps not all of 19 them even got out on the -- out of the terminal and onto the 20 frequency before this repeated tone sequence came up on the 21 air, correct? 22 A They -- perhaps not all of them got on the air 23 before Capitol's transmitter came up. As far as I know, the 24 rest of them did get -- were transmitted. RAM was already on

the air. My understanding of the functioning of this busy

25

1	monitor and the associated equipment is that once the
2	transmitter is on the air, it goes until it's finished.
3	Q So what we have is a cumulative problem. As Capitol
4	keeps sending out these tones and they're going from twenty
5	seconds to forty seconds, plus you're adding those seven-
6	second morse code identifications, that now you're talking
7	some serious time, correct?
8	MR. HARDMAN: I object, Your Honor. The witness
9	clearly testified that Capitol's storage capability was
10	limited and that the cumulative effect of storing the test
11	pages was limited to the amount of the storage capability.
12	JUDGE CHACHKIN: I'm going to sustain the objection
13	and you told me you had five minutes.
14	MR. JOYCE: I'm sorry, Your Honor.
15	JUDGE CHACHKIN: This is way past five minutes and
16	the whole procedure was improper in the first place since
17	you're now turning this witness into your own witness and you
18	aren't entitled to do so. Do you have any questions, Mr.
19	Hardman?
20	MR. JOYCE: One last question, Your Honor?
21	JUDGE CHACHKIN: No, I'm not permitting any further
22	questioning. Any questions, Mr. Hardman?
23	MR. HARDMAN: Unfortunately, Your Honor, I've got a
24	couple of lines that were as a result of Mr. Joyce's
25	question. I think I can be very brief.

1	JUDGE CHACHKIN: If you can't, we can pick this up
2	tomorrow morning at 9:30.
3	MR. HARDMAN: Well, for the sake of the record, I
4	think it would be useful to clarify a couple of these points.
5	JUDGE CHACHKIN: If you can do it quickly, fine.
6	RECROSS EXAMINATION
7	BY MR. HARDMAN:
8	Q Mr. Walker, you were asked some questions about the
9	community by Mr. Joyce on the community repeaters and the
10	link frequency. Do you recall those
11	A Correct.
12	Q that conversation? All right. Isn't it true
13	that the link frequencies which are assigned to control
14	stations used by PCP systems such as operated by RAM and such
L 5	as operated by Capitol are also assigned and shared by
L6	community repeater systems?
L7	A I believe this is true, yes.
18	Q So that in the same general area, you can have a
L9	control link operating and a totally independent system
20	operating a community repeater system on the same channel.
21	Isn't that true?
22	A That's entirely possible, yes.
23	Q And when that community repeater base station comes
4	on the air, it has the potential for desensing the link
5	receiver and effectively disabling it, does it not?

1 A It does. 2 You were also -- had a couple -- some discussions 3 about the transmissions real-time versus storage. 4 recall those questions? 5 A Yes. 6 And I think there was an answer that was not clear Q 7 on the record in terms of the mode that a paging terminal such as operated by Capitol or RAM is in if it does -- if it has 9 this storage capability. Isn't it true that if a system is operating automatically in the storage mode, that every page 10 11 that comes into that terminal is, in fact, stored before it's transmitted over the air? 12 13 A Every page --14 Regardless. 0 Regardless. I would imagine that as opposed to 15 16 real-time, somehow it does pass through this storage area. 17 So you didn't mean to imply that the same terminal 18 would operate alternately in the real-time versus storage 19 mode, did you? 20 A I'm not sure that I can really answer the question 21 here on the functioning of the terminal. I -- there's not to 22 be perhaps some delay as opposed to real-time. probably going to be some delay to determine whether the 23 24 channel is available for -- to transmit the signal or not and

25

FREE STATE REPORTING, INC.
Court Reporting Depositions
D.C. Area (301) 261-1902
Balt. & Annap. (410) 974-0947

for a decision to be made to store the page or not.

1	Q Well, what I'm trying to understand is what you
2	intended your testimony to be and did you intend to testify
3	that these that Capitol's terminal could operate
4	alternately in the storage mode versus the real-time mode?
5	Did it have that capability?
6	A No, I did not indicate that it would alternate it's
7	I intended to indicate that it's available for storage at
8	all times.
9	Q And so as far as you know, every page that came
10	into that terminal
11	A Could go into storage if need be.
12	Q And in fact, it might go into storage whether it
L3	needed to or not. Isn't that true?
4	A I cannot answer that.
15	Q Now, related to the storage question is how these
16	tone sequences were generated and when you and I were talking
L 7	about this earlier, I thought I understood you to say that
18	this was this was done through a program in a terminal.
.9	The tones were generated as a result of a program in the
0	terminal. Is that
1	A The tones, from my understanding, are generated
2	within the paging terminal.
3	Q So these tones never do go into a terminal like a
4	regular page. They're just generated there, are they not?
5	A Sir, I'm not sure I understand your question.

1	Q A regular page will come in and it will be stored in
2	the terminal. It's created from an external force. That is
3	quite different than the tone sequences that are generated as
4	a result of this program, is it not?
5	A I'm still confused. I don't understand the
6	question.
7	Q I believe that the or at least the way I
8	understood the thrust of the question from Mr. Joyce, your
9	answer could be read to imply that the test tones, the tests
10	that were generated on the terminal, appeared and came into
11	storage in the terminal, just like any other page. Do you
12	know whether that's so or not?
13	A I believe that would be true, yes.
14	Q And the fact that the tone that these were tones
15	generated internally by a program as opposed to externally
16	generated from some source through the telephone line wouldn't
17	make any difference on your answer?
18	A As far as I know, the system would not make a
19	distinction.
20	MR. HARDMAN: That's the
21	JUDGE CHACHKIN: Do you have any objection, Ms.
22	Foelak, to the witness being taken on direct at this time?
23	MS. FOELAK: Certainly not.
24	JUDGE CHACHKIN: All right. Then that's what we'll
25	start with tomorrow at 9:30.

```
(Whereupon, at 4:05 p.m. on Tuesday, February 1,
1
   1994, the hearing adjourned.)
2
3
5
6
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
```

CERTIFICATE OF REPORTER, TRANSCRIBER, AND PROOFREADER

IN THE MATTER OF	CHARLESTON, WEST VIRGINIA
Name	
PR DOCKET NO. 93-	·23 <u>1</u>
Docket No.	
WASHINGTON, D.C.	
Place	
FEBRUARY 1, 1994	
Date	
We, the undersign	ed, do hereby certify that the foregoing
pages, numbers	40 through 208 , inclusive, are the d complete transcript prepared from the
reporting by	MARYKAE FLETSHMAN in attendance at
the above identif	ied proceeding, in accordance with applicable current Federal Communications Commission's
	eatim reporting and transcription Statement of
Work and have ver	ified the accuracy of the transcript by (1)
recording accompl	ewritten transcript against the reporting or ished at the proceeding and (2) comparing the
final proofed typ	ewritten transcript against the reporting or
recording accompi	ished at the proceeding.
	$\Delta \Omega$
February 14, 1994	1 1 Varykal Thushman
Date	Marykae Fleishman , Transcriber
	Free State Reporting, Inc.
February 14,1994	A Drie X ///a ADDO
Date	Diane S. Windell , Proofreader
	Free State Reporting, Inc.
/	Marykal Fleishman
February 14,1994	
Date	Marykae Fleishman , Reporter Free State Reporting, Inc.